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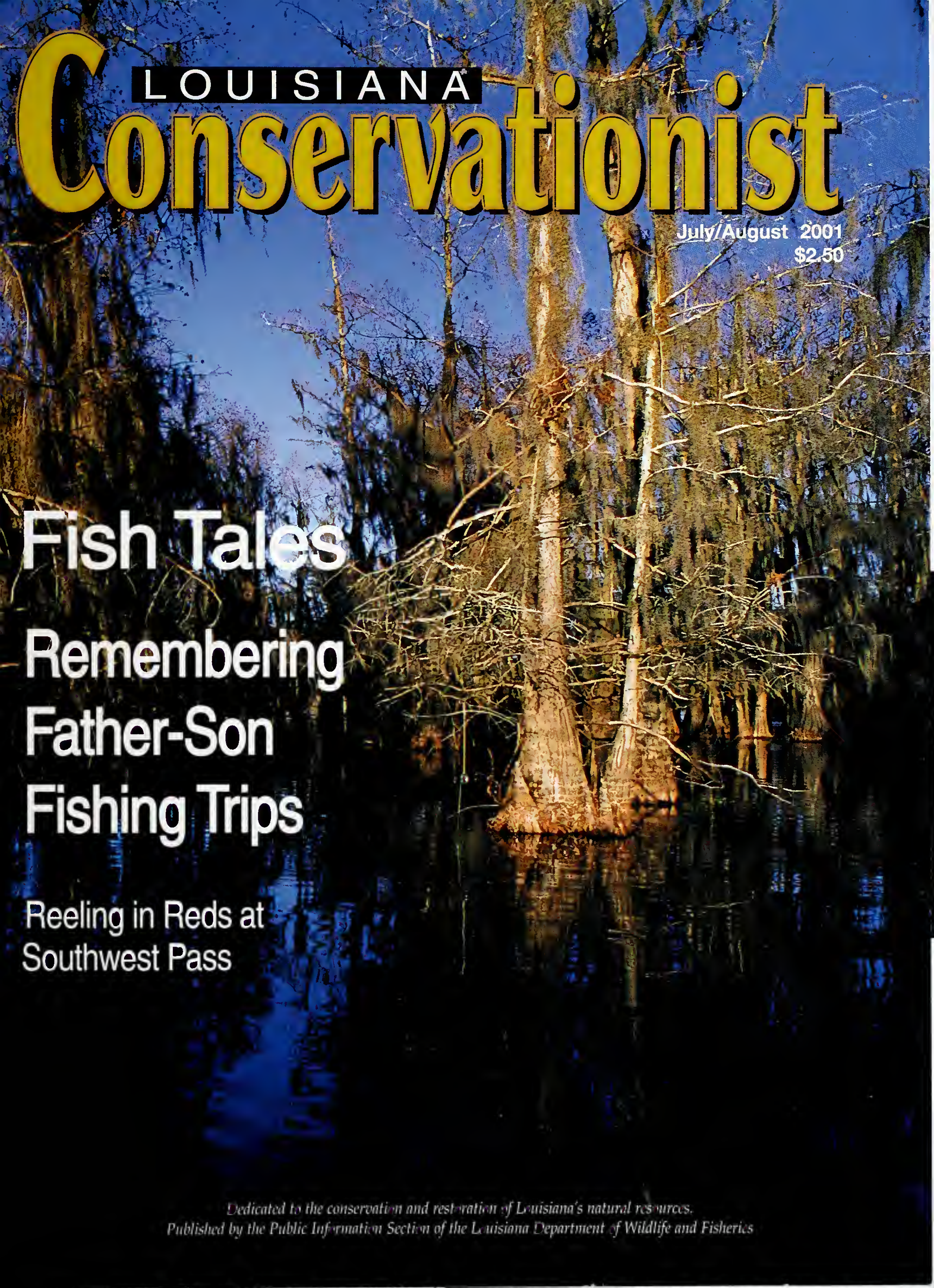

Fish Tales

Remembering Father-Son Fishing Trips

Reeling in Reds at Southwest Pass

Dedicated to the conservation and restoration of Louisiana's natural resources.
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Comments

By John Roussel, Assistant Secretary
Office of Fisheries

Since mid-1998 southern Louisiana has experienced unusual drought conditions ranging from moderate to severe, peaking with extreme conditions through most of 2000. It was during 2000 that Louisiana's fisheries was most significantly altered, alarming many citizens.

The effects of the drought was felt with both saltwater and freshwater fish species. In marine fisheries we saw salinity changes in Louisiana's coastal bays and lakes brought on by the drought combined with other salinity raising factors, such as low river discharge, low rainfall, low tides, unusual wind patterns, barrier island degradation and channelization. This was seen most notably with the increase in sharks caught by recreational anglers. Other high salinity species that ventured into coastal bays and marshes at higher than normal numbers were Spanish mackerel, white trout, bluefish, cobia and dolphin, catching many anglers by surprise. Common bay and marsh residents (spotted seatrout, red drum, black drum, sheepshead and flounder) took the opportunity to invade landward rewarding freshwater anglers with a diverse creel at the end of the day but frustrating saltwater fishing guides and anglers with empty honey holes. It did not, however, take long for the saltwater anglers to orientate themselves and locate new spots.

Freshwater fish also felt the effects of the drought in both negative and positive ways. In the brackish marsh areas of the state where freshwater fish cling to marginal living conditions, the increased salinities had a negative effect on populations. Freshwater fish do not have successful spawns in higher salinities, and growth rates and survival is reduced as salinities increase. These effects and changes will be evident for the next couple of years.

Further inland in the Atchafalaya Basin, the drought reduced crawfish production and harvest. With the reduction of flooded acreage in the basin came the reduction of spawning grounds, ultimately reducing the survival rate of hatched fish larvae that use those areas for protection and growth. This effect will also be apparent in two or three years.

On a more beneficial note, the Atchafalaya Basin experienced a positive effect from the drought. The prolonged exposure of water bottoms in the basin helped create viable habitat through natural changes that ultimately promote fish growth. These changes refer to processes dealing with organic composition and exposure to oxygen, but in short, this drought effect will give anglers bigger fish in the future.

Although drought conditions still exist throughout southern Louisiana, the severe conditions of summer 2000 have lessened and the recent flood rains of early June will certainly help our fisheries recover. The many concerns over the months were warranted, especially after viewing the unusual catches and loss of habitat, but we expect fishing to gradually return to its normal summer pattern, if it hasn't already.

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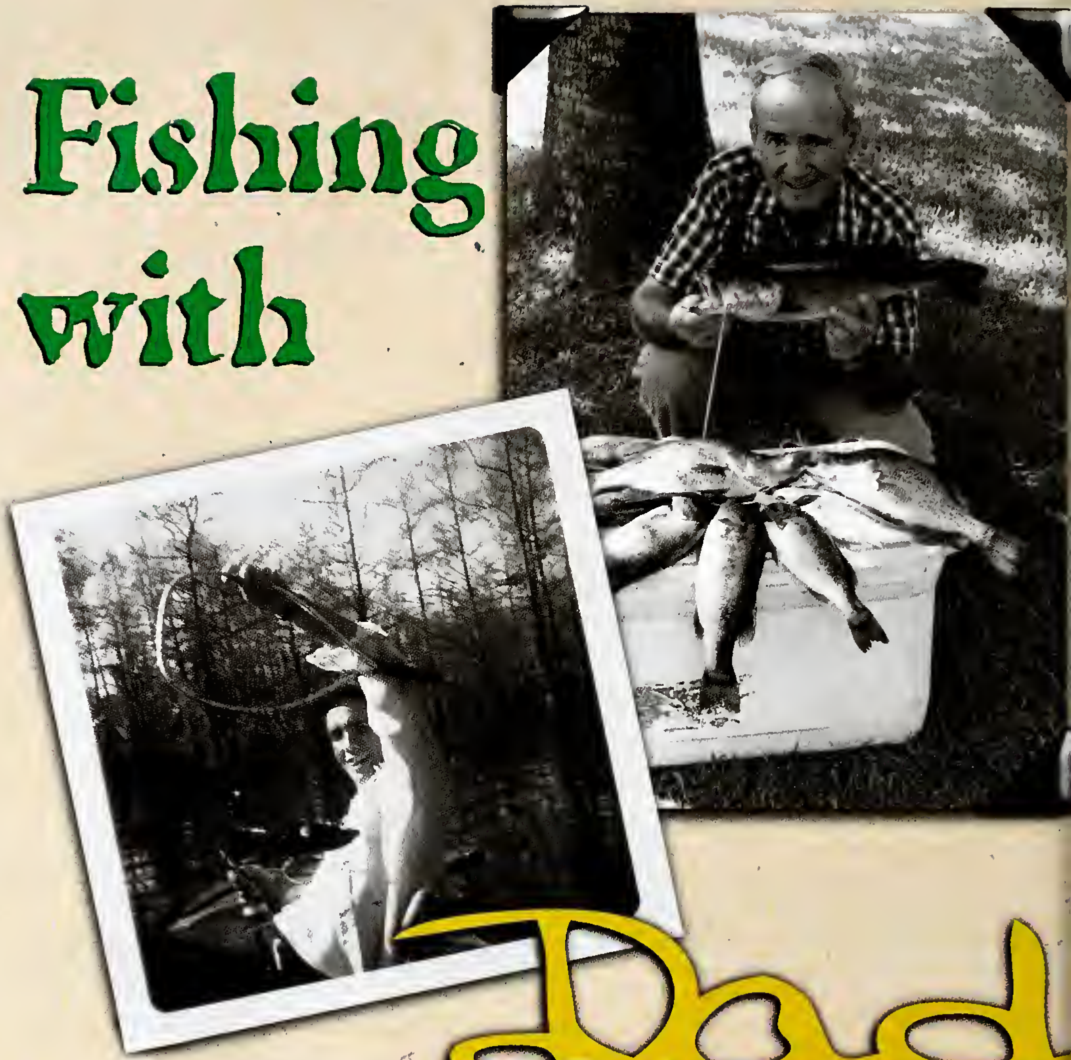
Front & Back Cover
Lake Bistineau
by C.C. Lockwood

Published by the Department of Wildlife and Fisheries in the interest of conservation of Louisiana natural resources.

Fishing with Dad



STORY BY
DAVID MORELAND

No doubt the greatest gift I ever received from my parents was their moving out to the countrysid near Lake Bistineau in the late fifties. Dad wa employed by ArkLa Gas Company, and our new home wa in a company house at the refinery on the Bistineau Road Around our house were fields and woods, and a mile dow the road was beautiful Lake Bistineau. My younger day were spent roaming through this countryside huntin squirrels, doves, and ducks or fishing on the lake with Dad.

My Dad was a complete fisherman. Not only did he reel them in, but he also built the boats we fished out of. Before moving to the Heflin Community, we lived on Summitt Street in Minden where Dad began building a family boat under the carport. I have very fond memories of this boat, for it enabled me to learn to ride my bicycle. I was a small guy, so it was difficult to get on the bike by myself. I would push the bike next to the boat, climb up, get onto my bike, and take off pedaling down the driveway. Before reaching the street, I would turn the bike into the grassy yard and crash. Time and time again I would go through this routine until I finally mastered the fine art of bike riding.

After settling into the rural environment of the Heflin community, Dad immediately began taking my brother Joe and me fishing. We motored out to Bird Island, the place to fish for bream. It was no easy task maneuvering the wide boat among the cypress trees, but Dad always managed it with skill. We loaded up with fish of every size; of course my brother and I thought every one was a trophy catch. All the fish were brought home, well over 100 bream, but I think Dad cleaned only the larger ones and shrewdly used the small ones for fertilizer in the garden. My brother and I never knew the difference.

It was around the time I was in the third grade when I became Dad's permanent fishing buddy. I remember those days vividly. Dad would arise before daylight to wake me up, and we would head for the lake. We would rent one of the boats at Bill's Camp. The family boat was simply too big and awkward to use for bass fishing. Eventually Dad bought one of the rental boats and converted it into a bass boat. He devised steering controls for the motor and rigged a trolling motor so we didn't have to paddle. The boat was powered with an old Mark-20 Mercury outboard motor. I think it was about 16 horsepower, but it got us around, and that's what mattered.

As I grew a little older, the anticipation of a Saturday morning fishing trip with Dad was almost excruciating for me. I would awaken with excitement at the first sound of the alarm (the radio-alarm was set on KWKH in Shreveport); however, I would

Lake Bistineau dates back almost 200 years. It began in 1800 when several thousand acres of land were flooded due to a gigantic log jam in the Red River. Gradually, however, as the area was dredged, the lake began to drain.

Photo by Alex Demyan

Photo by Alex Demyan

In 1935, a permanent dam was built across Loggy Bayou creating the present-day Lake Bistineau. The dam has since been enlarged, giving the reservoir a surface area of 26.9 square miles with an average depth of seven feet and maximum depth of 25 feet.

pretend to be asleep to let Dad come wake me. It was the supreme treat if we stopped for breakfast at Bill's Camp. I would feel like a big shot straddling the swivel stool at the counter with the other anglers and eating breakfast in a real café.

There's no doubt in my mind that Dad was a serious fisherman, but the sport was basically just fun for him. He never had to catch fish to enjoy himself or to consider the venture a success. I think being out on the lake and appreciating the sights and sounds of nature were enough for him. My favorite picture of Dad is one in the boat wearing his ArkLa Gas hat. A serene look of contentment is evident on his face.

Our conversations usually centered around the plants and wildlife that we saw on the lake. He would interject stories from his youth. As I studied biology in college the birds and plants took on new names and I would share this information with Dad. The small yellow birds frequently seen were Prothonotary warblers and the strange plants growing on the cypress snags were *Bidens bipinnata*, better known as Spanish Needles.

Dad carefully considered what baits to use on our fishing ventures. He really preferred to fish with top-water baits. The black tiny torpedo with white ribs was his favorite plug. I began my career using a Devil's Toothpick, switched to a Devil's Horn, and eventually fished mainly with plastic worms. Dad ended his career fishing with the Devil's Toothpick.

When I grew older and became a teenager, Dad and I continued to fish together even though I was quite capable of getting around on my own. By this time, however, the roles were beginning to reverse. I was the one to wake up first, make my way to my parents' bedroom on the back porch, and ask Dad if he was ever going to get up to go fishing. He always did.

To my memory, the most successful year Dad and I had fishing was following my freshman year at college. One morning we went out and loaded up with bass, most of which were two to three pounders. Dad used a Devil's Toothpick, and I caught my fish on a gold Rebel. When we returned to the camp with that limit of bass, old Mr. Bill bragged on and on about us to anyone who'd listen. That was also the summer I caught my largest bass–a five and half pounder–on a plastic worm. Dad was with me that afternoon, which made it all the sweeter.

After marrying, moving to Baton Rouge, and starting a family, I didn't fish very much. The rivers, bayous, and oxbow lakes were just not the same as Bistineau. I think the main reason, however, was that I didn't have Dad to fish with on a regular basis. My career and hobbies began to mesh, and most of my leisure time was now spent hunting, mainly deer.

Nevertheless, Dad and I would continue to fish Bistineau together on my return trips home to north Louisiana. The last fish I remember Dad catching is a classic fish story, but a bona fide tale. Dad's eyesight wasn't as keen as it had been, and he would get caught in the trees periodically. On one cast his Devil's Toothpick sailed neatly over a cypress limb and landed in the water. With his usual skill he made the plug bounce tantalizingly day up and down out of the water. Suddenly a solid, one-pound bass, unable to hold back any longer, grabbed the lure. The fight was on. When Dad lifted the big bass out of the water, it was evident who'd won that contest. I trolled over to retrieve the fish whose mouth was just below the cypress limb. The master still had the touch.

David Moreland is the Deer Study Leader for the Department of Wildlife and Fisheries. An avid hunter and fisherman, Moreland frequently contributes stories to the Louisiana Conservationist Magazine. He is a member of the Louisiana Outdoor Writers Association.

Beginning in January with the "yo-yo" season and lasting through the spring, summer and early fall, fishermen can reel in such catches as black crappie, largemouth bass, yellow bass, bullheads, bluegill and red-ear sunfish from Lake Bistineau's clear waters.

Photo by Alex Demyan

Home Tanning

A How-to Guide for Beginners

The animal hides that are by-products of your hunting efforts or the efforts of others can be turned into leather or hair-on skins. The amount of effort is reasonable and the materials used can be easily obtained. If at first you fail to obtain good results, don't become discouraged. Each attempt will increase your knowledge and experience of the process and the quality of the product.

STORY BY
SCOTT LONGMAN
&
MIKE WALKER

PHOTOGRAPHY BY
JOEL COURTNEY

Tanning is the process of converting animal hides which would normally decay into insoluble, strong, durable materials. The process removes the glue from the skin and the remaining skin fibers are separated and toughened. Oil and grease is forced into the open pores of the skin while drying and a flexible state is obtained. Leather is made when the inner muscular tissue, hair and epidermis removed leaving only the fibrous derma. Fur skin is different only in that the hair and epidermis are not removed. This process is often referred to as tawing instead of tanning to differentiate between leather and fur skin making.

Buckskinning is not actually tanning but involves a mechanical softening of the skin and includes using the animal brains or soft soap. Buckskin is not as moisture resistant as regular tanning and if soaked in water must be mechanically softened again. Two methods of processing animal skins that will be described here are chemical tanning using salts and acids and buckskinning using soap.

No matter what method of skin processing is used, the most important step is field preparation immediately following the death of the animal. The skin should be removed as soon as possible, taking care not to cut the hide. The more meat that is removed in the skinning of the animal means less to be removed in the fleshing process. After removal of the skin from the animal, lay the skin hair side down to dissipate as much body heat as possible. This can be done while you are still working on the carcass of any animals that were killed for meat. Heat contributes to the deterioration of the hide and can lead to problems in the tanning process.

If you do not plan to immediately start tanning, the skin must be temporarily preserved. The method chosen will probably depend on whether you are at home or at a field camp when the skin is removed from the animal. The skin can be thoroughly salted on the flesh side, rolled up and placed on a slanted surface in a cool, dry place to drain. It can be fleshed later. The only exception is if buckskinning is going to be the selected method of processing. Skins to be made into buckskin should not be salted.

The skin can also be frozen for a short period of time. Do not salt hides to be frozen. The salt inhibits freezing and bacteria will still be active. Frozen skins will freezer burn and should not be left in the freezer for more than a couple of months. When the skin is thawed it can be treated as a fresh skin just removed from the animal.

The skin can also be stretched and dried if all of the meat has been scraped away by fleshing. Stretching and drying can be accomplished by tacking the hide to a wooden surface and leaving an air space between the skin and the wood. Or, the skin can be stretched by threading a string through holes made in the edge of the skin and lacing around a strong frame.

For fresh skins or ones just removed from a freezer and thawed, the first step is called fleshing. Fleshing removes all vestiges of meat and begins opening the pores to receive a tanning solution. The skin can then be washed in borax and water to clean blood and dirt from the hair and skin. This should be done several times with a rinse in fresh water between each cleaning.

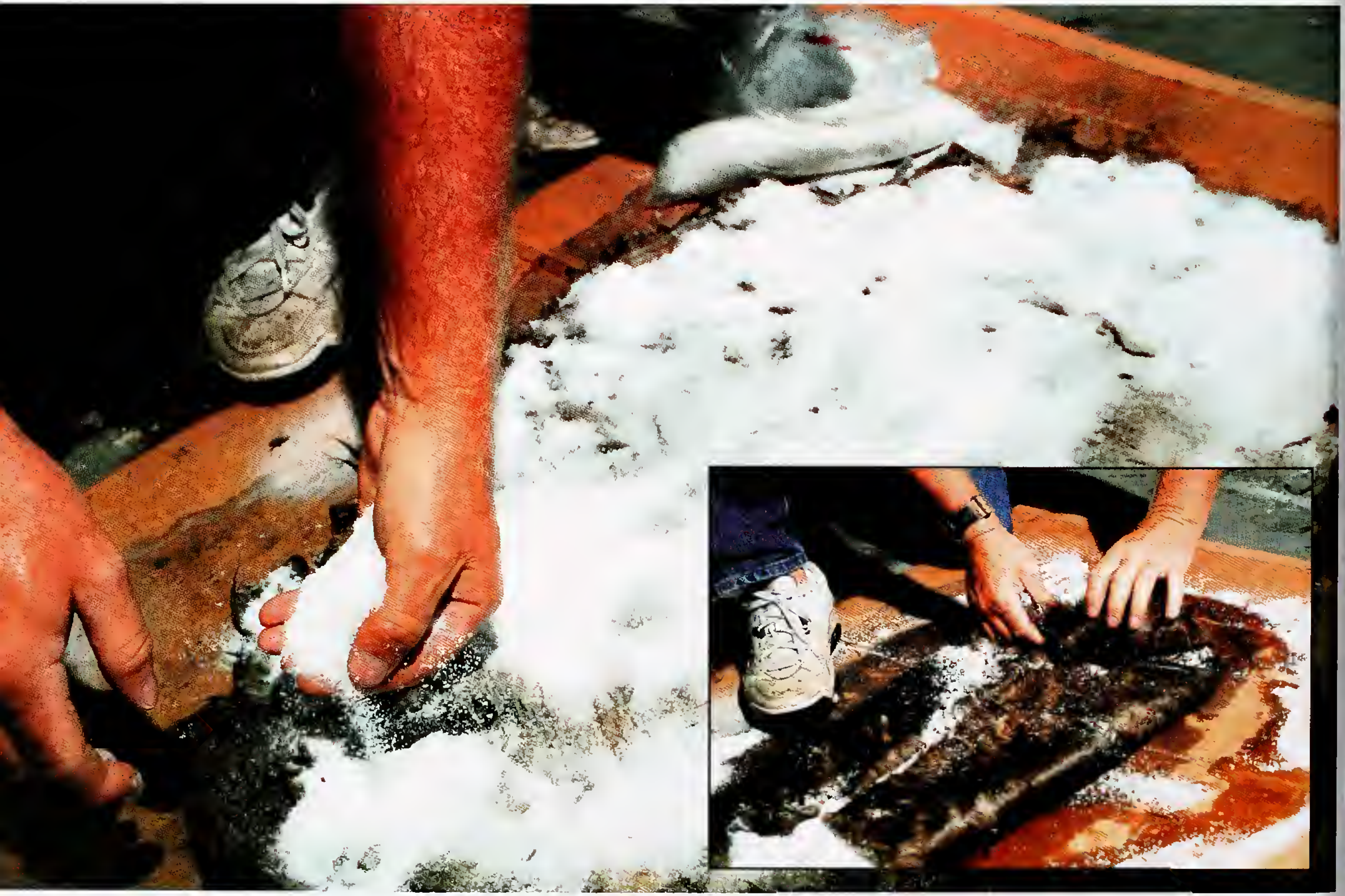
For skins that have been salted, rolled and drained, the fleshing process should also be employed even if the hide had been previously scraped to remove meat. All salt should be shaken from the skin and, after fleshing, it should also be washed in borax and water.

If a skin has been fleshed, stretched and dried it must be softened again by soaking in borax and warm water until it is as limp as it was when removed from the animal. The fleshing process should be repeated after softening.

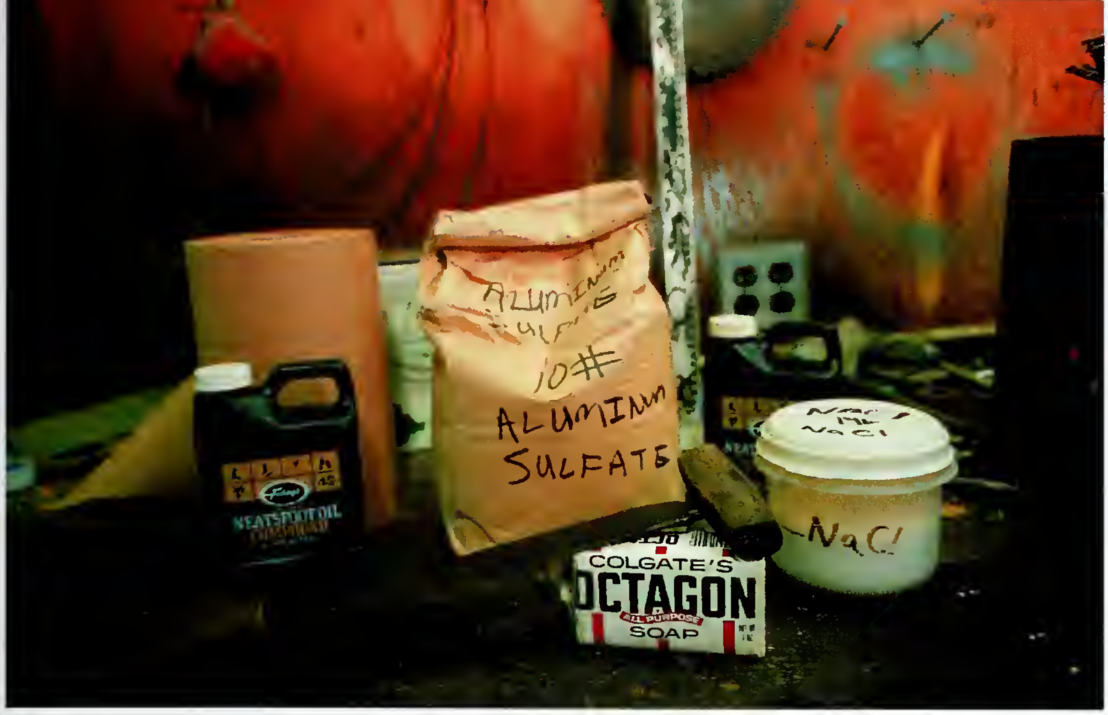
The fleshed, softened skin is now ready for either acid-alum tanning or buckskinning. To tan a fur skin with the acid-alum method requires soaking in two successive solutions. The sulfuric acid pickling solution is used before the aluminum sulfate tanning solution. The sulfuric acid pickle is made with two ounces of battery acid or one half ounce of concentrated sulfuric acid mixed in one gallon of water with one pound of non-iodized salt.

Proceed with extreme caution when using this solution. Sulfuric acid can cause severe burns and the fumes emitted are harmful. Rubber gloves and goggles are recommended when mixing or handling these solutions. The number of gallons of solution needed depends on the size of the hide to be pickled. Prepare an amount of solution from enough to completely cover a skin up to eight gallons for a normal sized deer hide. As some skins will float in the solution, they may have to be weighted down with non-metallic, non-reactive objects such as bricks. Stir the solution twice a day to make sure the skin tans evenly. Let the hide soak for seven to 10 days. The process can be checked by cutting through the edge of the hide and looking for a whitish color all of the way through the skin.

After the acid pickle, the skin should be soaked in the alum tanning solution. This solution is made with two pounds of aluminum sulfate, five pounds of non-iodized salt and 10 gallons of water. This is enough



If you do not plan to immediately start tanning, the skin must be temporarily preserved. As shown below, the skin can be thoroughly salted on the flesh side, rolled up and placed on a slanted surface in a cool, dry place to drain. Skins to be made into buckskin should not be salted.



The tool in the foreground is a fleshing tool made by the authors. Machetes, hoe blades or axe heads can be used in place of the fleshing tool.

solution to soak one normal sized deer hide. Divide the solution in half if tanning a smaller animal skin. Mix the sulfate with one gallon of hot water to aid in dissolving. When completely dissolved, mix half this solution with the water and salt and allow to cool to room temperature. Immerse the hide in the solution, weighing down if necessary and, after 24 hours, remove the hide. Add the remaining solution and return the hide to the mixture. Stir the hide in the solution twice a day and allow to soak for seven to ten days. Check the skin as described earlier and at the proper time prepare the neutralizing solution.

Neutralizing solution stops the acid from further acting on the skin and is made from one ounce of baking soda per one gallon of water. Make enough to cover the hide and soak the hide for about thirty minutes. Rinse several times in clean water. Use the fleshing tool to scud or squeegee the excess water out of the hide and allow it to dry until damp. Now the skin is ready for the breaking and oiling process.

Neatsfoot oil or some other brand of leather oil should be applied to the flesh side of the skin before it is completely dry. The skin should be broken by working the skin, flesh side down, back and forth in a shoe-shining motion over some thin edge fixed so as not to move. A breaking post can be built from scrap lumber with a base for stabilization and a semi-sharp edged piece of wood sticking up at a comfortable height. Even an old shovel or garden hoe handle with a dulled blade can be buried in the ground for stability and used to break the hide.

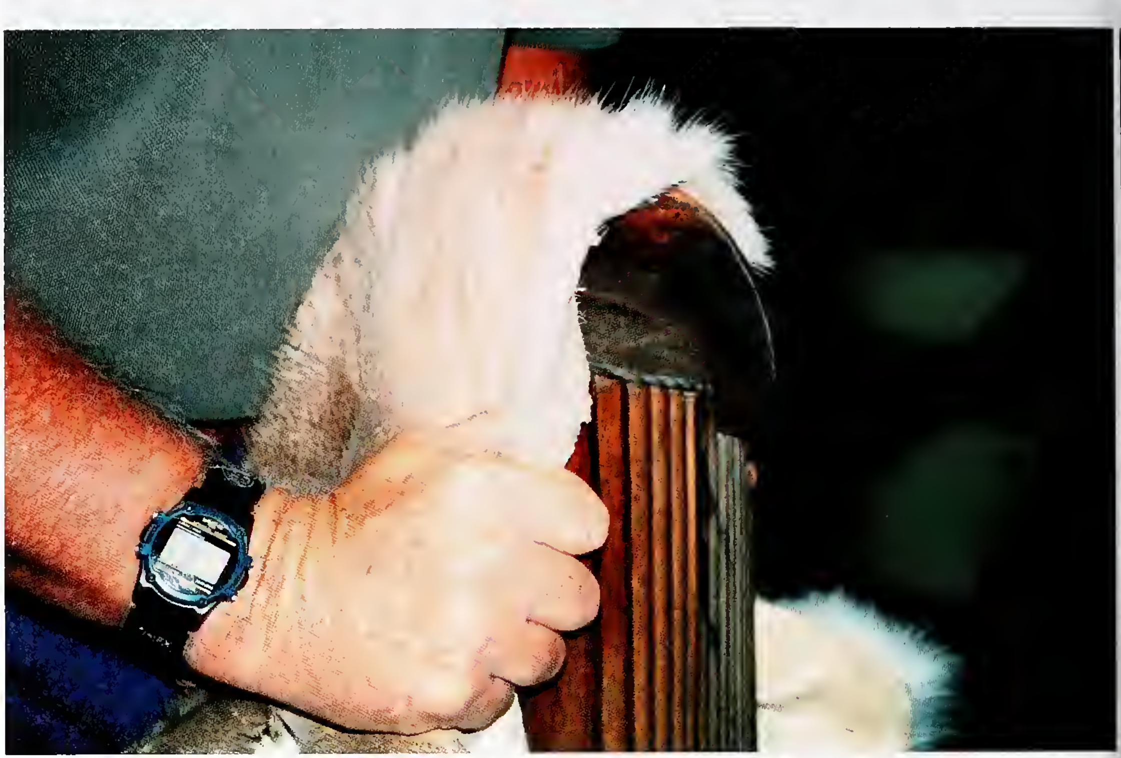
The hide must be worked until it is completely dry or it will not be soft. If it dries before the breaking procedure is done it will become hard and then it will have to be dampened again and the breaking process begun anew. This process can be repeated until the skin is as soft as desired.

Sometimes a hard skin is desired instead of a soft one for use to lie on a desk or table or tack onto a wall. This is easily done by tacking out the skin after it has been removed from the neutralizing solution, allowing it to dry and trimming the uneven edges. If desired, a lining can be sewn to the back of the skin. The skin can also be shaped over a mold and used for things such as arrow quivers.

The next process is not actually tanning as discussed before but is a mechanically softening of skins that have usually had the hair removed. Buckskinning can be accomplished using only water, Octagon brand soap and neatsfoot oil. The field preparation for buckskin is the same as discussed before describing the acid-alum tanning process. Remember that skins to be processed into buckskin should not be salted.

To remove the hair from a deer hide to be

The skin should be broken by working the skin, flesh side down, back and forth in a shoeshining motion over a fixed thin edge so as not to move.



made into buckskin is easy enough. Just soak the hide in warm water until the hair and epidermis slips off easily from pressure with the heel of the hand. *It is recommended that protective gloves be worn during this step to guard against bacterial infections.* More stubborn spots can be worked on with the fleshing tool to completely remove the hair and epidermis. This step smells bad and should be conducted at a distance from sensitive noses and foraging animals.

Once the hair has been removed, prepare a solution of warm soapy water using Octagon soap. Octagon soap is a yellow hard soap and it will have to be dissolved. Heat some water and using a knife or cheese grater, shave the soap into the heated water. Continue heating and stirring the water until the soap is dissolved. When the temperature of the soapy solution decreases to room temperature, insert the dehaired skin and leave it for four or five days.

Remove the skin after this time, and follow the breaking and oiling process described with the acid-alum process. Prepare another soap solution with a new bar of soap and repeat the soaking process. When the solution can be easily squeezed through the skin, remove the skin and repeat the oiling and breaking process until it is as soft as desired.

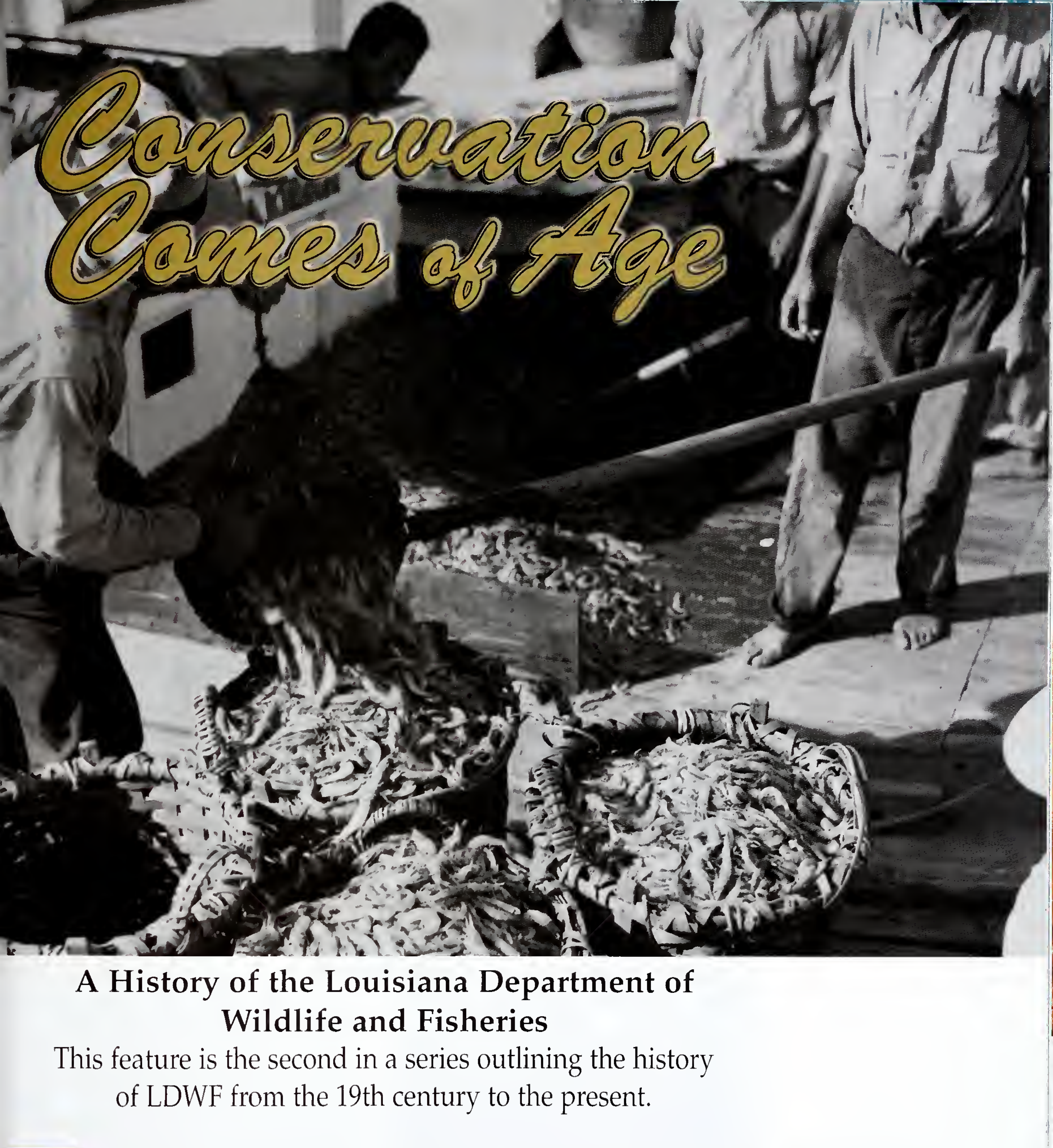
The finishing step is to waterproof the buckskin by cool smoking. Dig a small pit and burn charcoal briquets until they are a uniform white in color just as if barbecuing. Place some green wood on the briquets to produce copious amounts of smoke. Build a frame to hold the buckskin over the briquets away from the heat and allow the smoke to penetrate the skin. Stay near with some water to put out any flames and allow the skin to smoke for a few hours.

The result will be a piece of buckskin similar to what Indians and mountain men used for articles of clothing and other things. This leather will become hard again if drenched in water and will have to be softened again. It is not useful for articles that shouldn't stretch when wet.

Uses for the finished skins are limited only by imagination.

Scott Longman and Mike Walker are LDWF Inland Fisheries biologists. They have 20 years experience in home tanning methods.

Conservation Comes of Age



A History of the Louisiana Department of Wildlife and Fisheries

This feature is the second in a series outlining the history of LDWF from the 19th century to the present.

STORY BY LISA NOLAND

Louisiana's Department of Wildlife and Fisheries dates back to 1857 when the first conservation law was passed to protect migratory gamebirds. The law demonstrated an awareness of conservation but unfortunately was not enforceable. Additional conservation laws were passed throughout the late 19th century to protect and regulate the oyster industry resulting in the creation of the Louisiana Oyster Commission under Governor W. W. Heard in 1902. The commission later became the Oyster, Waterbottoms and Seafood Division, making it the first and hence oldest division of LDWF.

The Oyster Commission was created as a definitive answer to 19th century problems among oyster fishermen. Stories of the oyster wars are intriguing because of the cultural diversity in the industry—a state already founded by so many diverse cultures—first, the native Americans, Europeans, Africans and many others.

By the early 20th century, a national conservation movement was in full swing. President Theodore Roosevelt, a friend and hunting buddy of Louisiana Governor John Parker, was responsible for giving the movement a higher priority in national affairs. Louisiana, well-known for its great hunting opportunities, played a major role in the push for prudent use and management of natural resources. Parker lobbied the Louisiana Legislature in 1909 to create the Louisiana Board of Commissioners for the Protection of Birds, Game and Fish. In 1910 the Oyster Commission merged with that board to create the Department of Conservation.

Roosevelt, an avid outdoorsman, greatly appreciated Louisiana's abundant natural resources and unique beauty. Roosevelt visited Louisiana several times, exploring numerous hunting, fishing and birdwatching opportunities. He documented some of his trips with features written for *Scribner's Magazine*.

> "I give my pledge as an American to save and faithfully to defend from waste the natural resources of my country — its soil and minerals, its forests, waters and wildlife."
>
> Theodore Roosevelt, 1908

In *The Louisiana Canebrakes*, printed in Scribner's in January 1908, Roosevelt wrote about a bear hunt in northeastern Louisiana at Tensas Bayou. The president's hosts included Parker, who would later become Roosevelt's running mate in an unsuccessful presidential bid, and John A. McIlhenny of Tabasco fame.

"I was especially anxious to kill a bear in these canebrakes after the fashion of the old southern planters, who for a century past have followed the bear with horse and hound and horn in Louisiana, Mississippi and Arkansas," noted Roosevelt. "Our first camp was on Tensas Bayou ... There is no richer soil in all the earth."

Black bears were not an endangered species in 1906 when the hunt took place. The federal government passed legislation to protect species from extinction 70 years later.

Roosevelt wisely noted then that, "A big bear is cunning, and is a dangerous fighter to the dogs. It is only in exceptional cases, however, that these black bears, even when wounded and at bay, are dangerous to men, in spite of their formidable strength."

In 1915, Roosevelt again visited Parker for a tour of the bird refuges of Louisiana. Roosevelt wrote another feature documenting his observations.

The Bird Refuges of Louisiana, first published in *Scribner's* in March 1916, refers to Parker's role in conservation. "One of the Parker sons runs the family stockfarm in upper Louisiana, beside the Mississippi. There is no wanton molestation of any animal permitted, no plundering of nests, no shooting save within strictly defined limits, and all rare things are given every chance to increase...in clearing a tract of swamp land, a heron's nest was discovered, the bushes round about were left undisturbed, and the heron family was reared in safety. Wild turkeys have somewhat, and quail very markedly, increased. The great horned owls, which destroyed the ducks, have to be warred against, and the beasts of prey likewise."

Roosevelt also described an outing on the Louisiana gulf coast. "One, good-sized and comfortable boat, under the command of Captain Lewis Young, was the property of the State Conservation Commission of Louisiana, the commission having most courteously placed it at our disposal. The other boat, named the *Royal Tern*, was the property of the

Audubon Society, being allotted to the work of cruising among and protecting the bird colonies on those islands set apart as bird refuges by the National and State Governments. On this boat went Mr. Frank Miller who was at one time president of the Louisiana Conservation Commission, and the founder of the Louisiana State Audubon Society, and is one of the group of men to whom she owes it that she, the home state of Audubon, of our first great naturalist, is now thoroughly awake to the danger of reckless waste and destruction of all the natural resources of the State, including the birds."

Roosevelt further noted that, "The State Conservation Commission owes its existence to the wise public spirit and far-sightedness of the Louisiana legislature. The Audubon Society, which has done far more than any other single agency in creating and fostering an enlightened public sentiment for the preservation of our useful and attractive birds."

He went on to describe his gulf tour and describes early wildlife enforcement efforts in the state. "The *Royal Tern* is commanded by Captain William Sprinkle, born and bred on this gulf coast, who knows the sea-fowl, and the islands where they breed and dwell, as he knows the winds and the lovely, smiling, treacherous gulf waters. He is game warden, and he and the *Royal Tern* are the police force for over five hundred square miles of sand bars, shallow waters, and intricate channels. The man and the boat are two of the chief obstacles in the way of the poachers, the plume-hunters and eggers, who always threaten these bird sanctuaries."

Roosevelt also mentioned the formation of wildlife refuges in the state, "On the initiative of the Audubon Society, the national government, when I was President, began the work and established, from March 14, 1903 to March 2, 1909, fifty-two reservations; since then, from April 11, 1911 to January 20, 1915, seventeen more reservations have been added by government action."

Louisiana's vital role in conservation is also addressed: ". . . the third day of our trip, when we were within sight of Fort Jackson and of the brush and low trees which here grow alongside the Mississippi, we were joined by Mr. M. L. Alexander, the president of the Conservation Commission, on the commission's boat *Louisiana*. Mr. Miller told me much of the work of the commission; work not only of the utmost use to Louisiana, but of almost equal consequence to the rest of the country, if only for the example set. The commission . . . has already accomplished a remarkable amount along many different lines."

Louisiana Legislative Act 265 of 1910 served to form the commission which had as its primary goal, "to make a thorough investigation of the oyster industry of the state and to inaugurate a new system of management." Members of the commission were appointed by Governor Jared Y. Sanders and included Frank Miller of New Orleans, Fred J. Grace of Plaquemine and W. R. Dodson of Baton Rouge.

Act 127 of 1912 constitutionally created the "Conservation Commission of Louisiana," mentioned by Roosevelt. The commission was created as a department of state government, provided for the protection of birds, fish, shellfish, wild quadrupeds, forestry and mineral resources of the state. The act of 1912 was amended in 1918 by Act 105, which stated, "the Department of Conservation is hereby created. It shall be controlled by an officer to be known as the Commissioner of Conservation. The Commission shall be appointed by the Governor, by and with the

Governor John M. Parker, in office when the Department of Conservation was formed, was Teddy Roosevelt's running mate in the 1912 presidential election.

consent of the Senate for a term of four years."

In 1917, Lucy Powell Russell went to work for the commission as secretary to the commissioner. By 1922, Russell's diligence, leadership abilities and complete understanding of conservation issues prompted Commissioner V. K. Irion to appoint her secretary of the department. At the time, Department of Conservation headquarters was housed at 400 Royal Street in New Orleans. Russell's achievements were remarkable at a time when women had only recently gained the right to vote.

Probably one of Russell's most important accomplishments was to create the department's first official magazine. The *Louisiana Conservationist Magazine*, a nationally-renowned and award-winning publication was first published in January 1923 as the *Conservation News*. Russell defined the mission of the magazine "to carry the story of what the Department of Conservation is doing to conserve and replenish nature's bountiful gifts to the Pelican State of bird life, fisheries, forests and minerals."

Russell further noted that she hoped "the News would bring about better interdivisional relationships between enforcement, fisheries, oysters, forestry, wildlife and minerals. The six divisions necessarily function as separate units of the department's work. But closer understanding and better cooperation exist when each division is acquainted with the problems and accomplishments of every other division."

Russell's tenure with the department ended when a new governor took office. Yet another chapter in LDWF history began with the Huey Long administration, the Great Depression and World War II.

The Louisiana Department of Wildlife and Fisheries has a long and colorful history. The department grew out of necessity to protect and regulate the state's valuable resources and great leadership was key to its growth. Those resources, substantial legislation and committed individuals all served to create an essential state agency.

The next installment of LDWF history will include events from 1930 through 1960.

Lisa Noland is a LDWF Public Information Officer and staff writer for the Louisiana Conservationist Magazine.

Land's end—where the Mississippi River meets the Gulf of Mexico.

Photo courtesy of the Louisiana State Library

A KITE'S TALE

Once you've been awestruck by the majestic beauty of the Swallow-tailed Kite soaring overhead, you too will be mesmerized by their flight and become addicted to searching the sky for them...

STORY BY DONNA BUSH

PHOTOGRAPHY BY BRIAN MILLER

They hang in the sky suspended in flight. With the tiniest twitch of their tails, they dive in a display which is pure magic to the eyes. "Spirit-that-soars" is the Calusa Indian phrase for swallow-tailed kites. These majestic birds most often grace us with their presence in southern Louisiana. Indeed, we are among the fortunate few who are able to behold these magnificent predators during their breeding and nesting season.

The Swallow-tailed Kite is a member of the family *Accipitridae* (hawks and eagles). Although not an endangered species, this hawk is considered something of a rarity. Their range originally extended as far north as the Great Lakes. Now they are seen in North America primarily along the southeastern coastal states of Florida, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana and Texas. They begin arriving in Louisiana as early as February, and are heavily involved in nesting by March and April.

Swallow-tailed Kites prefer tall, accessible trees for nesting with open areas for feeding. In Louisiana they are normally found near forested wetlands and forage over these wetlands, pine forests, marsh and agricultural fields. Their nests are often found in pine trees, or sometimes cottonwood or sweetgum trees. Nests average about 60 to 100 feet above ground and are made from sticks, moss and lichens. Both adults take part in the nest building and maintenance. About 60 percent of the time, the prior year's nest is reused. Throughout the nesting period, the adults will bring fresh lichen in to line the nest. Nests measure approximately 10 inches deep and 15 to 22 inches in diameter, with sometimes as much as three feet of moss hanging down.

Swallow-tailed Kites are very communal, nesting in colonies of two to six or more nests. Additional kites, beyond the parents, are often observed around the nest. Their role in nesting, if any, is not yet known. During courtship, the male is often seen putting on glorious displays, soaring overhead carrying a rough green tree snake, diving and turning on the wind, all to impress his female. When the chicks fledge, all the kites in the area put on spectacular air shows.

At the end of the 1800s there was a sharp population decline in many of the migratory bird species. Various reasons for this decline

These birds of prey require tall trees for nesting and nearby open country with abundant prey. Swallow-tailed Kites typically place nests near top of one of the tallest trees available, more than 60 feet above ground.

include extensive logging and urban growth causing reduction in range and bounties on hawks to name a few. According to biologist and Tulane University Ph.D. candidate Jennifer Coulson, the Swallow-tailed Kite is a prime species for studying the decline of a variety of neo-tropical migratory birds. The Swallow-tailed Kite is long-lived, easily identifiable and large enough to carry a transmitter with a two-year life-span. Swallow-tailed Kites have a strong site fidelity for their nesting location. With respect to the Pearl River Basin, Coulson says "The increased market value of timber coupled with the number of stands that are reaching a harvestable age may mean that too much nesting habitat is now being harvested at too fast a rate." Compounding this is increased development, suburban sprawl and increased value of land, plus less replanting of trees after harvesting takes place. Frequently the Swallow-tailed Kite returns from its winter migration to find its home has been destroyed, habitat rendered undesirable or the neighborhood has changed such that food sources are rare.

As part of her research, Coulson spends many hours scanning the treetops, searching for these fork-tailed beauties. Aided by numerous reports of sightings from avid birders throughout the Pearl River area, she pinpoints nests, obtains access permission from the property owners and records the existence of nests.

Clutch size ranges from one to three eggs. Once the eggs are laid, the nest is considered an active nest. A nest is considered successful when at least one chick fledges. Incubation takes approximately 28 days. Weekly, Coulson checks nests' status, i.e. the number of chicks, age estimate and health condition of the chicks. These birds are targets of other predators, such as great horned owls, red-shouldered hawks, turkey vultures, black vultures and raccoons. Like any other young animal, they are also subject to the hazards of Mother Nature. Some have succumbed to parasitism and have been blown out of the nest by thunderstorms. Fledging of the chicks occurs around 36 to 42 days after hatching. Fledging is when the chicks are able to leave the nest under their own power (flight), but are still dependent on their parents for food.

Approximately one to two weeks prior to their fledging, Coulson tags the chicks. Central Louisiana Electric Company (CLECO) and Asplundh Tree Trimming Service provide a tree-climber and ground support for the effort. While the tree climber collects the chicks from the nests, adult Swallow-tailed Kites soar overhead calling their alarm. Depending on how many nests are nearby, other adults join the fracas.

On the ground the chicks are carefully weighed and measured by Coulson. Then a radio transmitter is strapped to each chick and carefully adjusted to allow for growth. The transmitter has an approximate two year life span, which enables biologists to track migration and nesting habits. Blood is drawn to be used for DNA testing to determine sex, paternity and genetic diversity of populations. Each chick is misted with water to help cool it off and discourage flight before it is returned to the nest. The chicks are then returned to their nests.

After all the chicks fledge, Coulson takes to the air herself. Antennas are attached to the wings of the monitoring plane, and a cable run into the airplane's cabin. Flying at the lowest legal limit above the treetops along the river, Coulson dons a headset and listens for the beeps from the radio transmitters. Other observers on the flight keep an eagle eye for the site of a kite roosting in a tree or soaring nearby. Each sighting is recorded and if the kite is wearing a monitor, it is identified by its frequency.

Adult Swallow-tailed Kites are also trapped and tagged by Coulson. An open area fringed with tall trees near nests is necessary. Two fine-threaded nets are rigged at different heights. Julio, Coulson's great-horned owl of 12 years, is tethered to a perch feet from the nets. When the adult kites see this fierce predator of young chicks in their territory, they begin soaring overhead calling their alarm and gradually coming lower and closer to Julio. They are attempting to scare Julio away from their nests. Eventually an adult kite will overcome its fear and dive low enough to be caught in the net. The adult kite is tagged much the same as the swallow-tailed kite chick, then released. Neither Julio nor the Swallow-tailed Kites are harmed. Julio is very good at his job as Swallow-tailed Kite bait and takes it very seriously.

Coulson receives grants to help fund her study of American Swallow-tailed Kites from southeast Louisiana refuges, USFWS; Biological Resources Division of the USGS; The Nature Conservancy of Louisiana; Louisiana Ornithological Society; Orleans Audubon Society; Baton Rouge Audubon Society and private donors. She also receives in-kind support from CLECO.

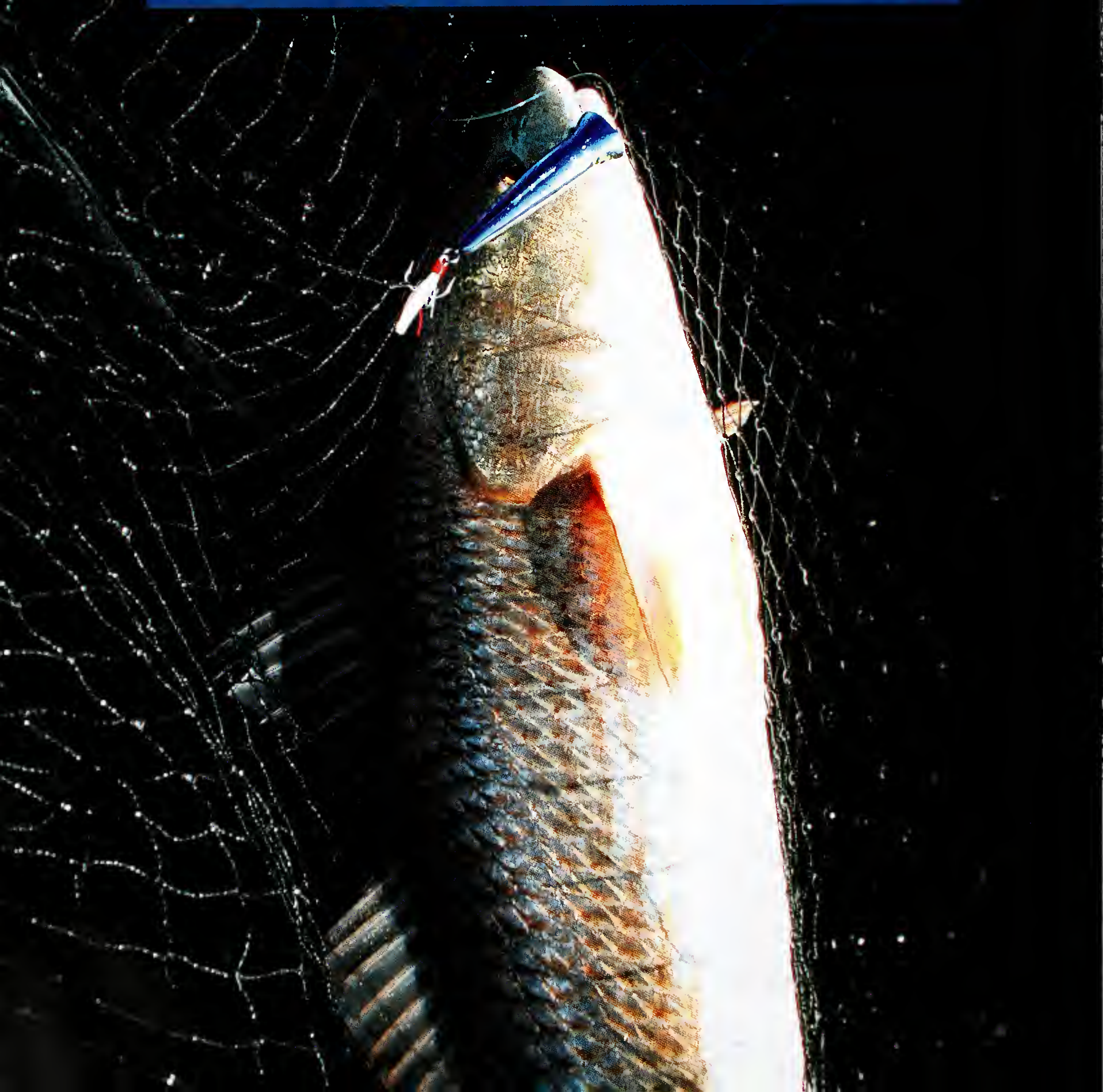
Editor's note: According to LDWF non-game biologist Nancy Higginbotham, Sherburne Wildlife Management Area offers excellent Swallow-tailed Kite viewing opportunities for birders.

Donna Bush is a freelance nature photographer and writer and a member of the North American Nature Photographers Association and the Southeastern Outdoor Press Association.

The Swallow-tailed Kite is extremely maneuverable in flight. It catches flying insects in the air and takes much of its food by swooping low over trees or lower growth, picking small creatures from the twigs or leaves without pausing.

Summer

at Southwest Pass



It can be just as good as Autumn!

STORY BY PETE COOPER, JR.

I doubt many in-the-know folks would disagree if I declared the jetties at the mouth of Southwest Pass comprise the quintessential redfish spot in the state, if not in the entire country. At least, they do during autumn. So what's their status during summer, the time of vacations and our normally most settled and fishable weather?

Would you believe they can be just as good in summer as they are in the fall?

In truth, though, most of my recent summer forays to Southwest Pass were bail-outs after discovering the westerlies had kicked West Delta into a froth. One of those, a July fly-fishing trip intended for cobia and tripletail, resulted in three creditable king mackerel and three big and brutal jackfish—two of the species you can expect to encounter here along with the reds during summer and fall. Those six fish, by the way, made for an action-packed day.

In another bail-out instance, my son-in-law, Chris Disher of Lafayette, had come down to the Delta to participate in the Empire/South Pass Tarpon Rodeo. The second day of the event was drop-dead gorgeous, and while running the rips out in West Delta, Chris got a cobia that eventually netted him the second-place trophy in that category. Conditions on the third and final day, though, were radically different.

After beating out a mile or so south of the Tiger Pass jetties—and while doing so noticing a boat much larger than mine reverse course after apparently opting for Plan B, we followed suit. An hour or so later we ducked around the end of Southwest Pass' east jetty and not unexpectedly found a pocket of calm, clear water.

My log book indicates that by working the slope of the jetty's rocks with half-ounce jigs on heavy casting tackle, we caught four bull reds in the 20 to 30-pound class, all being released as none were big enough to enter into the rodeo. We also got a 20-pound king, several Spanish macks, ladyfish and hardtails, a 20-inch speck, and a small grouper! Not too shabby for a bail-out trip that began late and ended early so that we could attend the rodeo's final weigh-in.

Bail-outs are one thing; directed efforts are not necessarily another, and Southwest Pass does not often discriminate between the two. Friends from the Florida Keys and Houston were down for an extended offshore session, the weather throughout it was perfect, and West Delta was at its best. But around noon on their second day the guy from Florida said he'd like to catch some redfish. So I relented and headed toward the east jetty where, by bumping shrimp-tipped jigs on bottom of the hole at the end of the rocks, he and his Texas compadre quickly caught six, all well over the 27-inch size restriction, before I was able to convince them to quit this easy fishing and renew the quest for West Delta's beasties. Incidentally, that was one of the most easily-accomplished redfish missions I ever undertook, but again, it was not surprising.

I did end up feeling a little guilty on a trip last year with a stock broker/hunting/fishing buddy and his son-in-law. He had asked me to "show the boy around," so since it was such a fine day we headed down the river in search of bulls. And as is usually the case, they were there—proven by my taking a 16-pounder and then a real beauty estimated at around 35 before it was released. Although my companions did have action, sadly it was provided by the lesser types. So that brings us to the point where discussion on how to appease the reds and at the same time avert (somewhat) the "lesser types" is in order.

To begin with, Southwest Pass' east jetty—usually the most productive of the two because of the deeper water alongside it—is not a good place to go if you want to box a limit of reds!

Photo by Soc Clay

Photo by Pete Cooper, Jr.

The tip of Southwest Pass' east jetty is a popular spot but equally good action occurs for some distance back up the rocks.

Indeed, recently it has become quite difficult to catch more than a couple of them less than 27 inches long on any given trip—most are considerably larger. That fact, plus the very good probability that a few of the other large, tackle-testing types present here will also be entertaining you, makes the place a place for fun and frolic rather than for fillets.

That being the case, one should arm himself with tackle that is up to the task. I carry two casting outfits when I am not fly-fishing there, a 6 1/2-foot medium-heavy pitching stick with a top-line reel holding 200 yards of 17-pound mono and a 6 1/2-foot extra-heavy muskie rod with a top line reel one size larger than the other and holding around 175 yards of 30-pound mono.

I prefer my guests use the lighter outfit; at my age and physical condition I like to use something I can lean on a big fish with so I can whip it and send it back home before it whips me! Same goes with fly tackle—the east jetty happens to be the spot where I caught both the top red and the top king in the fly fishing division of the state's fishing records. Each weighed 36 pounds—12-weight stuff, thank you very much.

Whatever outfit you decide to use, rely on a short length of clear-green 50-pound mono for a fray-resistant leader. However, if you get a couple of snip-offs from suspected kings, replace the mono leader with a foot or so of 60-pound single-strand wire. Jigs in the 3/8 or 1/2 ounce range are favored; use the lightest you can cast effectively and will reach bottom in the current normally present here. Queen cocahoes in purple or chartreuse are good choices.

Upon your arrival, you will probably see several boats anchored outside the jetty from its tip up to a point roughly opposite the lighthouse. They will be bottom-fishing with bait and will likely be catching fish, especially those near the end of the jetty. If your thing is soaking bait while at anchor, then this is the place for you to really knock your lights out. However, if you prefer a little more active fishing, then idle up the jetty a few hundred yards and drop the trolling motor.

It is usually best to work the jetty while moving north, since in that direction you will be headed into the current which passes through the rocks. That's an aid in controlling the boat. Also, do not be concerned if the water looks grungy. That's only on the surface; clear green gulf water lies just beneath it.

As you move along the jetty, try to create a mental image of the structure being an elongated two-sided pyramid with its apex just above the water's surface and its base on the seabed. A two-dimensional side-view of it will show the edge of its base some distance offshore of its apex. The rocks along that slope—virtually from the water's surface to bottom—hold baitfish which attract the reds. To most efficiently cover this structure, position the boat 30 to 40 feet distant and make your casts to a point about six feet from the rocks slightly ahead of the boat. Immediately begin a slow, pumping retrieve, allowing the jig to sink deeper as it is being drawn away. Done properly, the retrieve will cover the entire strike zone.

Well, except when they are in schools patrolling up and down the jetty just beneath the surface! If the water is clear, keep an eye out for that possibility.

Besides serving as prime baitfish habitat, the jetty serves as a blocking element for kings, jacks, and others which are riding herd on schools of mullet, menhaden, and such. Should you have a fondness for a king's first run, or should you take masochistic pleasure in dealing with jackfish—and you happen to notice showers of baitfish and large swirls outside the rocks, then work the jig much shallower and faster than you would for the reds.

Finally, a large landing net is a must for unhooking and releasing the reds and jacks, but a king can tear one up in a heartbeat. Summer's kings here normally weigh less than 25 pounds or so and can be easily tailed either bare-handed or while wearing a filleting glove. Once the fish is at boatside, simply grab it at the base of the tail and slide it aboard. It will kick once or twice, but that's about it. Once it has been quickly unhooked - should you plan to release it, thrust it vigorously headfirst back into the water, and it shouldn't be any worse for wear.

Thinking about king, though reds are predominant here, you never know just what might eat your jig off Southwest Pass' east jetty during summer. Captain Ronnie Granier caught the state's only recorded snook there a few years back, and tarpon are hooked every now and then, if not actually caught. Then there are the mangrove snappers...

So many possibilities, so little time...

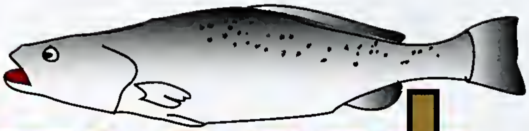
Pete Cooper, Jr. is a 33-year resident of Buras, a full-time free-lance outdoor writer and photographer and a member of the Outdoor Writers Association of America since 1990.

Bull reds are almost as common along the east jetty during summer as they are in autumn.

Photo by Pete Cooper, Jr.

Species Profile

Spotted Seatrout



The spotted seatrout (*Cynoscion nebulosus*) is one of the most important recreational and commercial marine fishes in Louisiana. They are highly prized by commercial fishermen as a valuble food fish and by recreational fishers for their fighting ability on light tackle. According to statistical estimates, 68.3 percent of anglers in the gulf coast region target this marine fish as their preferred recreational species.

The spotted seatrout is silver with a slightly bronze back; distinguished from the other two seatrout by a pattern of small dark spots on the upper back and sides. External characteristics of the spotted seatrout include an elongated body, somewhat compressed; back—slightly elevated; head—long; mouth—large, oblique; lower jaw—projecting; scales—moderate, thin. Other common names include speckled trout, speck, truite gris (Cajun French), trucha de mar (Spanish), weakfish, spotted squeateague, salmon trout, seatrout, yellow-mouth and black trout. Spotted seatrout can live up to 12 years. Females outlive males. The International Game Fish Association (IGFA) all tackle world record for spotted seatrout is 16 pounds and was caught in Virginia in 1977. The Louisiana Outdoor Writers Association (LOWA) record for spotted seatrout caught in Louisiana waters is a 12.38 lb. fish caught in 1950.

RANGE/MIGRATION

Spotted seatrout range from Cape Cod, Massachusetts, southward to the Cayman Islands in the lower Gulf of Campeche, Mexico and are most numerous in the Gulf of Mexico from the west coast of Florida to Texas. In Louisiana, spotted seatrout are generally found in lower, more saline bays in winter, and in near-shore gulf waters during spring and summer months with smaller individuals found year-round in upper portions of the estuaries. However, the highest catches of spotted seatrout occur along or near beaches, followed by passes, lake-bay areas, marsh, and open gulf fishing areas. Most researchers generally agree that spotted seatrout have relatively small home ranges, and seldom travel more than 30 miles. During late fall, spotted seatrout begin to move from ponds and shallow lagoons within the estuary to deeper bayous, canals, or gulf waters to escape low water temperatures. Many of these trout migrate back to the estuaries when water temperatures and water levels moderate. Similarly, these fish will also move to deeper waters when the water temperature rises during late summer.

REPRODUCTION

Spotted seatrout in the Gulf of Mexico have a protracted spawning season, generally February through October, with peaks in late April through July, depending upon water temperature, salinity, and photoperiod. Optimal spawning conditions exist at water temperatures near 28 degrees Celsius, and water salinities ranging from 20-35 parts per thousand. Male spotted seatrout aggregate in the evening or early night in a suitible spawning habitat and attract females by making drumming sounds. Female trout do not possess this “drumming” characteristic. During spawning there is a constant “milling” and jumping of the school and side-to-side body contact among fishes. Spotted seatrout in Louisiana can spawn up to eight times per year.

HABITS

Spotted seatrout begin to school at six to eight weeks of age and continue schooling until about five to six years of age, when most males have died and the remaining large females, called “sow” or “gator” trout adopt a semi-solitary existence. Swimming behavior of these large fish is slow and deliberate, except when frightened, or capturing prey. Spotted seatrout are carnivorous and feed primarily on crustaceans and smaller fishes, including other spotted seatrout. Diet varies with size, with smaller individuals feeding on invertebrates and small fishes, while larger individuals (greater than 17 inches) tend to prey exclusively on fishes. Forage fishes (primarily croaker, spot, menhaden, and striped mullet) are the most important food species consumed by larger spotted seatrout in Louisiana.

REGULATIONS

Currently, the legal limit on spotted seatrout for recreational anglers is 25 per day, with a minimum size restriction of 12 inches total length. During open season, commercial fishers may harvest spotted seatrout with rod and reel only, and must possess the proper commercial fishing license and permit.

from our PERSPECTIVE...

Why Doesn't the Spring Shrimp Season Open on the Same Date Across the Coast?

BY MARTIN BOURGEOIS
Marine Fisheries Shrimp Program Manager

Each May, one of the most often asked questions of the Department is "why doesn't the spring shrimp season open on the same date across the coast?" In response to this question, let me first say that timing is everything. For instance, an opening date that's right for Lake Pontchartrain may not be right for Barataria Bay. Spring shrimp season openings, potentially set at the right times and in the right places, result in increased harvest and corresponding dollar value enhancing economic benefit to Louisiana shrimpers. In establishing opening dates, the Louisiana Wildlife and Fisheries Commission examines the most current data on shrimp migration and environmental conditions but also chooses to balance these factors with local preferences. But before beginning a more complete explanation, let me provide some historical perspective and rationale for development of the Department's criteria for managing the brown shrimp resource.

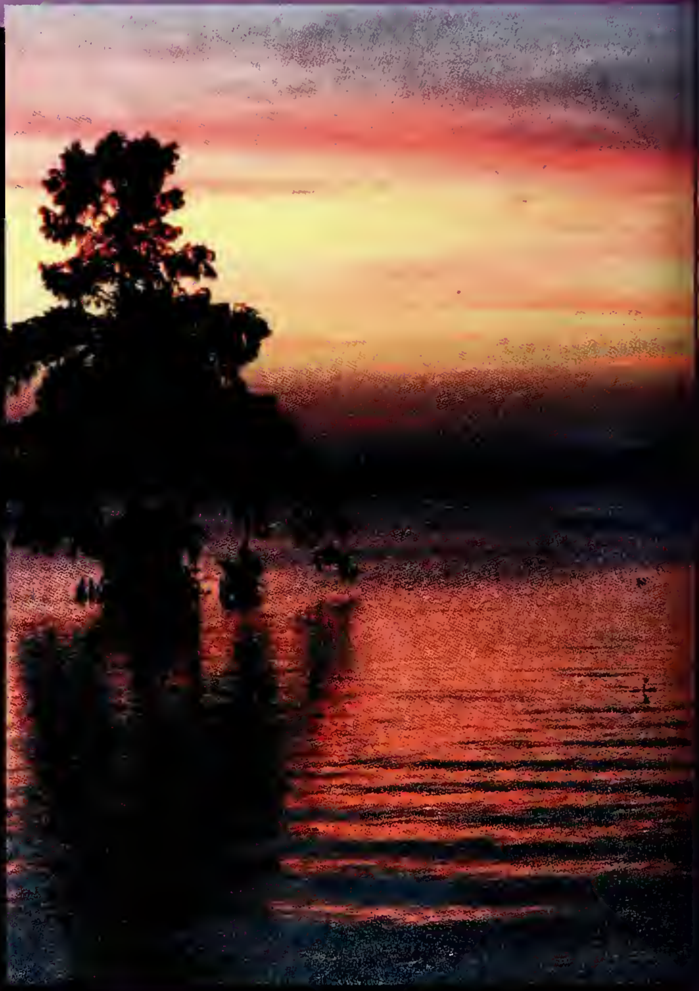
During April and May of the late 1950's and early 1960's, prior to enactment of the current management scheme, unrestrained fishing effort for spring white shrimp in inland waters resulted in the destruction of juvenile brown shrimp populations in their infancy. Recommendations for spring inshore season openings based upon a brown shrimp management criteria were first suggested in the mid 1960's. Early research studies conducted by Drs. Ted Ford and Lyle St. Amant recommended use of 100 count (whole shrimp per pound) as a basis to open the spring inshore shrimp season. The 100 count size was selected following consultations with the Louisiana shrimp industry and recognition that the Louisiana shrimp fleet was predominately a small boat fleet largely incapable of harvesting brown shrimp in open gulf waters where shrimp sizes significantly larger than 100 count most often occur. Thus, the Department adopted this management scheme and has since used the 100 count per pound criteria in projecting the first day when a minimum of 50 percent of the inshore brown shrimp population will be 100 count per pound or larger. These projections are based upon average growth rates of shrimp as well as environmental factors which influence their growth.

Beginning in 1975, the Louisiana coast was divided into three Shrimp Management Zones. Zone 1 comprises inshore waters east of the Mississippi River and extends from the Mississippi state line to the eastern shore of South Pass of the Mississippi River. The central region of the coast comprises Zone 2 which includes inshore waters from the eastern shore of South Pass of the Mississippi River to the western shore of Vermilion Bay and Southwest Pass at Marsh Island. Zone 3 includes inshore waters extending from the western shore of Vermilion Bay and Southwest Pass at Marsh Island to the Texas state line. This new zoning concept was a response to obvious differences in times in which small post-larval shrimp enter and larger sub-adult shrimp leave bay systems, shrimp growth rates and average size as well as environmental conditions which influence these factors between geographic areas. Utilization of zones when appropriate provides greater flexibility to better manage the shrimp stocks associated within each zone.

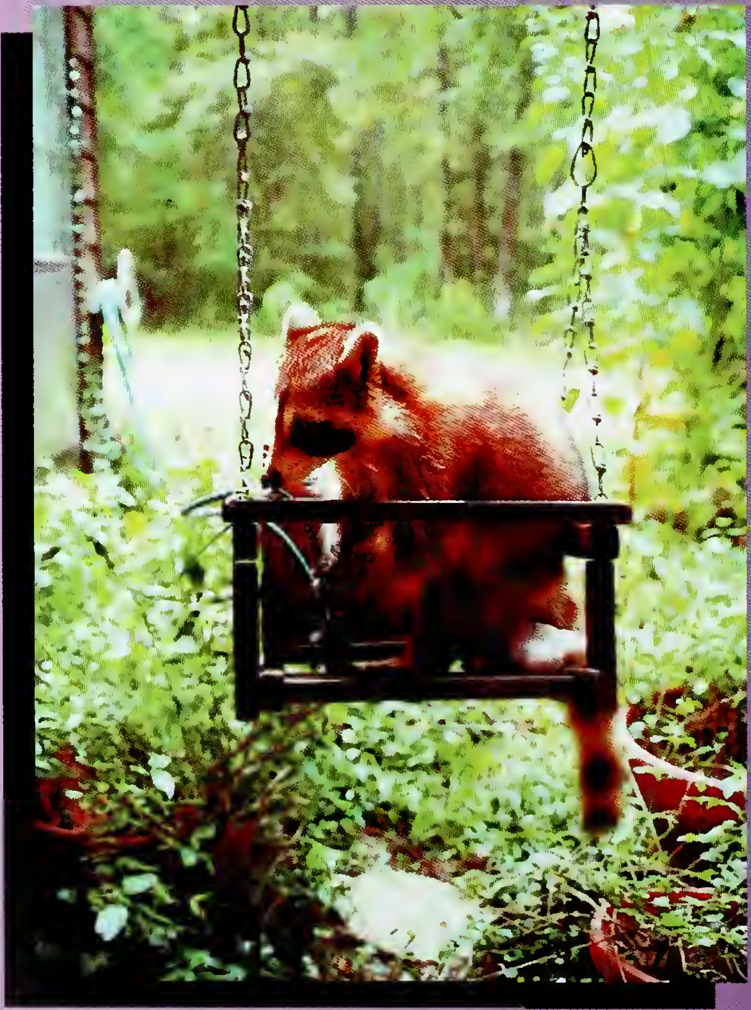
One may argue that staggered spring inshore shrimp season zone openings result in increased conflict among fishermen when fleet concentrations develop. In general however, the shrimp fleet has always been fairly mobile and boats often tend to concentrate within areas of high shrimp availability, regardless of the distance from home port. Offshore shrimpers may argue that staggered zone openings create a net loss of shrimp availability for them or that they have to change fishing patterns by delays in season openings. In response, utilization of staggered zone openings when biologically justifiable allows for increased opportunity for the harvest and sale of larger sizes of shrimp which provides for greater economic benefit while offering increased protection to populations of smaller newly recruited and unmarketable shrimp. Additionally, reductions in waste of the resource associated with discarding practices, unobserved mortalities and harvest of small shrimp are achieved.

From our perspective, establishment of shrimp management zones has specifically allowed for staggered spring inshore shrimp season openings when biologically justifiable. Zoning has also provided for increased utilization of special seasons to effectively harvest significant populations of large over-wintering white and pink shrimp as well as allowing for special season extensions within zones when appropriate.

Photography Showcase



Natural Habitat: Sunset on Lake Arthur
Photo by
Linda Breaux
Lafayette



Louisiana Species: Raccoon
Photo by
Elizabeth "Bootsy" Hutchinson
Baton Rouge

Louisiana Species:
Black Fox Squirrel
Photo by
Maria Heymann
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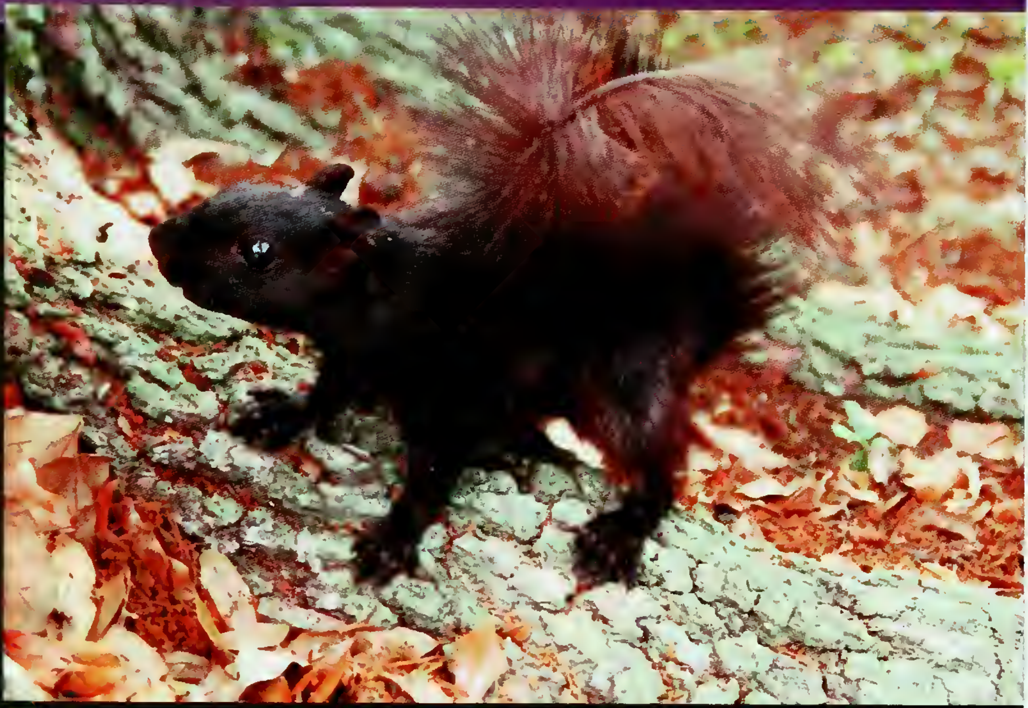
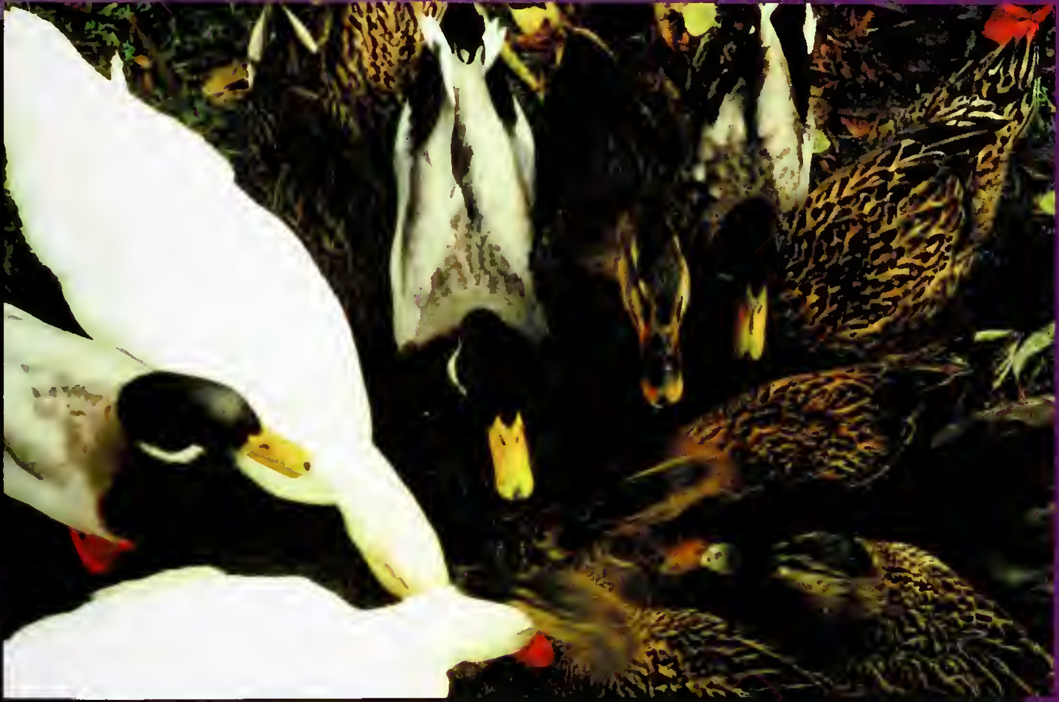
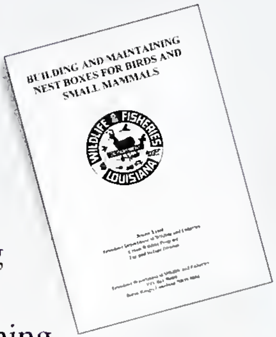




Louisiana Species:
Wild Mallards with
Domestic Ducks
Photo by
Theresa Waguespack
Morgan City

LOUISIANA Conservationist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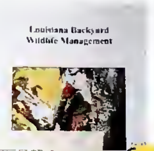

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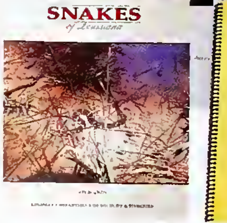

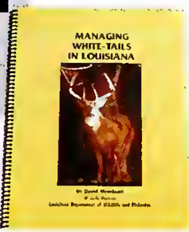

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Wildlife
MANAGEMENT AREA

ATCHAFALAYA DELTA

The Atchafalaya Delta Wildlife Management Area, leased and managed by the Louisiana Department of Wildlife and Fisheries Fur and Refuge Division, is located at the mouth of the Atchafalaya River. This 137,000-acre area of accreted land and shallow, open bays was leased from the state of Louisiana in 1979.

Two delta areas occur on the management area —the Main Delta and the Wax Lake Delta. The Wax Lake Delta was formed as a result of channelization of Wax Lake from its confluence with the Atchafalaya River to the gulf. The Atchafalaya Delta WMA is the only significant accreting marshland in the state due to the silt-laden waters diverted from the Mississippi River. Exposed land has increased from about 10,000 acres in 1981 to about 19,500 acres in 1995. Soil particles are dropped from suspension as the river water is slowed down at the delta, and islands are formed. Emergent plants such as delta duck potato rapidly vegetate these new islands to provide excellent waterfowl habitat. Mudflats adjacent to the islands are vegetated with submerged pondweed and other aquatic plants. Higher sites are vegetated with three-corner grass. A small impoundment adjacent to the campground was put into use in 1990, which should add habitat diversity in years to come.

Habitat conditions on the delta are improving every year, and wintering waterfowl populations are increasing accordingly. These ideal conditions for waterfowl result in peaks of 250,000 ducks and 10,000 geese during the wintering waterfowl period. Mallards, pintails, teal, gadwalls, and canvasbacks are the dominant species of ducks. White-fronted geese, blue and snow geese and a small population of resident Canada geese are present on the area.

The oldest islands are vegetated with trees, mostly willow. Several newly emerged willow stands have become wading bird rookeries. Ibis, roseate spoonbills, and several species of egrets and herons use these sites. Plantings of several oak species are currently underway to provide mast for the increasing white-tailed deer population on the area. The Atchafalaya Delta WMA hosted its first deer hunt (bow only) in 1993.

The Atchafalaya Delta Wildlife Management Area provides possibly the finest public waterfowl hunting in the nation, requiring extensive law enforcement by on-site personnel. Increased recreational use of the area during waterfowl season will prove to be a management and enforcement challenge in the near future. Several cooperative or contracted research projects with state universities are conducted on the area. Mottled ducks, wintering waterfowl, nutria, shorebirds and wading birds are all focal points of research.

Travel to the area is limited to boats or aircraft. Boat travel should be attempted only in larger boats capable of traveling in rough water. It would be highly advisable to organize a group trip and hire a local charter boat for a trip to the management area.

Boat launch facilities are located at Morgan City near the Bayou Boeuf locks, below Berwick on the Intercoastal Waterway and one-half mile above U.S. Hwy. 90 on the east levee of the Wax Lake Outlet. The Wax Lake route is probably most desirable. Always get a long range weather forecast before making a long boat trip.

LAW lines

BY MAJOR KEITH LACAZE

Becoming A Wildlife Enforcement Agent

Conservation law enforcement is both a fascinating and challenging career choice, and requires a special kind of individual. The person must be self-reliant, yet able to work as part of a team. He or she must combine a love of the outdoors with a keen interest in law enforcement. If you are thinking about working in wildlife law enforcement, here are some things you should know.

The wildlife agent patrols alone most of the time, without the benefit of assistance from other officers. When working in a remote area, he often has no communication. Even if he has radio contact, backup may take hours to arrive. On other occasions, he must work as part of an organized team and the success of the group may depend on his ability to perform the task specifically assigned to him.

The wildlife agent's job keeps him outdoors much of the time, which means contending with weather conditions ranging from staggering heat to numbing cold and everything in between. He spends countless hours in boats, vehicles and on foot waiting for poachers who may or may not show. The seemingly ever-present mosquitoes are abundant and hungry.

The balance of an officer's time is spent writing arrest reports, attending never ending training and filling out mountains of forms. Equipment has to be maintained and kept clean which means spending time washing muddy trucks and dirty boats. Worse than that is time spent sitting for hours waiting to testify in court where defense lawyers do their utmost to make the arresting officer look like the most inept fool ever to don a uniform.

Anyone considering a career as a wildlife agent should spend time talking with someone in the profession. Ask him to explain both good points and bad. A clear understanding of what one is getting in to may prevent pursuing an unsuitable career and way of life.

After getting a clear understanding of what the job is all about, it is time to consider the necessary preparations. College credit will help meet the requirements for entry into wildlife law enforcement, so high school students should consider taking college preparatory classes. They may also enroll in outdoor-related courses such as the hunter education and boater education classes offered by the Department of Wildlife and Fisheries.

College students interested in careers in conservation law enforcement should study criminal justice in combination with biology, zoology and perhaps forestry in order to have a well rounded background of knowledge pertinent to the job.

The minimum qualifications for becoming a wildlife enforcement cadet, the entry level position, are two years of previous law enforcement experience, or 60 semester hours of college, or a combination of the two. Military service time may be substituted for the required education and experience. Contact the Department of Civil Service, Examining Section for more information about qualification.

In addition, applicants may have no felony convictions, must be at least 18 years of age and have a driver's license.

The wildlife enforcement cadet position has a starting salary currently at $1,937 per month. Pay increases based on satisfactory or above satisfactory performance occur after the first six months, at 18 months and annually at a rate of 4% in the form of merit increases thereafter until reaching the maximum pay for the rank held by the agent. Higher ranked positions carry higher salary ranges and promotional opportunities do exist.

In order to be placed on the Civil Service list of eligibility, a qualified applicant must submit a state pre-employment application (SF-10) to the Department of Civil Service. The applicant will then be notified of the date, time and location where the mandatory Civil Service examination will be given.

If the applicant scores high enough on the exam to be ranked in the top five scoring group, his or her name is added to the list of applicants to be notified for interviews for vacant positions around the state. A hiring board comprised of senior officers of the Enforcement Division conducts the interviews. Selections are made based on the test score, the interview and practical and physical testing of candidates.

Selected applicants must submit to a background investigation, physical exam and drug screen. If all requirements are met with satisfactory results, the candidate is hired as a cadet. He or she and their fellow cadets immediately enter the Wildlife Law Enforcement Training Academy located in Baton Rouge. The group, now a cadet class, must successfully attend and complete all classes and the very demanding physical training required in the basic training academy. Total training time for an academy class is about 25 weeks. Cadets receive basic police officer training and additional specialized training in wildlife law enforcement.

Upon graduation from the academy, the cadet goes to his assigned work district as a wildlife enforcement agent. He or she works under the guidance of a field training officer or a supervisor for one year. After a year of satisfactory performance, he is promoted to the rank of wildlife enforcement senior agent and is considered a fully certified field officer. The senior agent works throughout the district either alone or with other officers as needed.

Promotional opportunities occur when higher level positions become available through vacancy. The next level above senior agent is sergeant. Each parish has a wildlife enforcement sergeant who coordinates enforcement activities in the parish and assists the district lieutenant. The lieutenant oversees a district consisting of two or three parishes in most cases. The next level is wildlife enforcement captain, a region supervisor. He is responsible for the supervision of the districts included in his region, usually two or three districts. The bulk of his time is spent in the region office.

The Enforcement Division also has areas of specialization in which field officers may choose to work. Among those are the Covert or "undercover" Section, the Saltwater Enforcement Patrol (SWEP), the Special Investigations Unit and the Oyster Enforcement and Refuge Patrol.

Wildlife agents continue training throughout their careers and are will equipped with the personal gear, vehicles and boats necessary to get the job done.

For anyone who believes the protection of wildlife would be a meaningful career, now is the time to begin preparation. The Louisiana Department of Wildlife and Fisheries is always looking for people with the dedication and determination necessary to be Wildlife Enforcement Agents.

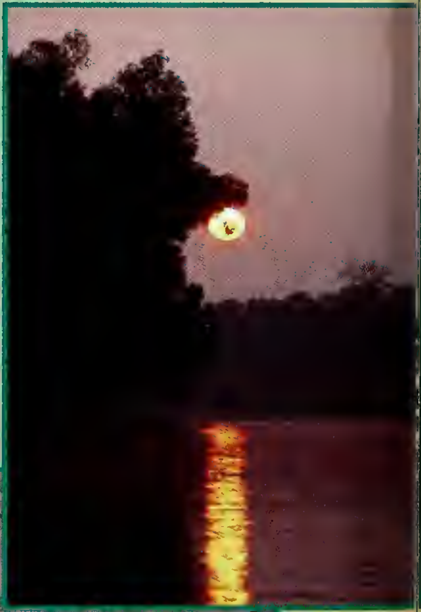
Photography Showcase

This section will display photographs submitted by our readers. One photograph from each category is selected by our staff and showcased in each issue. This is not a contest but a selection of photographs that show originality, uniqueness and creativity. Selected photographers will receive a Louisiana Conservationist one-year subscription gift certificate which can be used to start a new subscription, extend an existing one or given as a gift.

GUIDELINES

All entries not following the guidelines will be returned unused.

1. Anyone who can operate a camera can enter. Wildlife and Fisheries employees and immediate family members are not eligible.
2. Black and white, color transparencies and color prints are acceptable. All prints must have an accompanying negative. Do not cut the negative — send the entire strip.
3. Prints must be mounted on sturdy poster or matt board.
4. Name, address, phone number and age must be included with or written on each entry. Unlabeled entries will be returned unused.
5. Include a description and location of each photograph. Specify appropriate category.
6. Only first time published photographs should be submitted.



DEADLINES

January 1, March 1, May 1, July 1, Sept. 1

All photographs will be returned.

CATEGORIES

A. Natural Habitats: scenic shots of Louisiana. These may or may not include wildlife or people.

B. Louisiana species: native species of Louisiana. This includes plants and animals.

C. People in Nature: People involved in outdoor activities other than hunting and fishing.

D. Hunting & Fishing: People enjoying Louisiana's oldest outdoor sports.

Mail submissions to Louisiana Conservationist Showcase, Third Floor, P.O. Box 98000, Baton Rouge, LA 70898

C'est Bon!

from the

Official Louisiana Seafood and Wild Game Cookbook

Shrimp and Linguine

3 lb. peeled shrimp

1 lb. linguine

4 Tbl. Parmesan cheese

1/2 cup white wine

1 can (6 or 8 oz.)mushrooms

8 Tbl. butter

4 Tbl. flour

2 cups milk

1/2 tsp. salt

1/8 tsp. red pepper

Prepare white sauce and keep warm. Melt 4 tablespoons butter in 2-quart pot over low heat; stir flour to form paste, add milk, salt and pepper. Continuing on low heat, beat with a wire whisk until smooth and a desired consistency.

Using large skillet or deep pan, melt 4 tablespoons butter on low heat, add shrimp and chopped garlic. Cook till shrimp turn red (approximately 5 minutes or less); add wine and place pan aside. Cook linguine in boiling water al dente. Drain and place in large platter, mix in buttered shrimp and mushrooms and cover with white sauce. Sprinkle with cheese.

Squash Rockefeller

6 yellow squash

2 cups chopped spinach, cooked and drained

4 Tbl. butter

4 Tbl. green onions, minced

4 Tbl. flour

1 cup milk at room temperature

2/3 cup Cheddar cheese, shredded

8 slices bacon, cooked and crumbled

salt, pepper and cayenne to taste

dash of nutmeg

Trim off ends of squash and cook whole in salted boiling water about 10 minutes or until barely tender. Drain well. Half lengthwise and scoop out centers. Chop pulp and combine with spinach.

In a saucepan, melt butter and saute onions until wilted. Blend in flour and add milk stirring constantly. Cook until thick.

Add seasonings to spinach mixture and stir into sauce. Spoon into squash shells and top with cheese and bacon. Bake at 350 degrees for 15 to 20 minutes.

Spinach & Mushroom Salad

1 lb. fresh bulk spinach

1/2 lb. medium size mushrooms, sliced

2 hard boiled eggs, finely chopped

4 slices bacon, cooked & crumbled

Wash spinach thoroughly; remove tough stems and bruised leaves, dry on paper towel. Tear leaves into bite-size pieces and place in a salad bowl. Add eggs, mushrooms and bacon, water chestnuts, croutons or any other favorite. Cover bowl with plastic wrap, then refrigerate. Dress with Orange Soy Sauce.

Photo by David Humphreys